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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/710,183	11/09/2000	Kent Montgomery Brothers	CREO115917	4426
720	7590	10/06/2004	EXAMINER	
OYEN, WIGGS, GREEN & MUTALA			GIBBS, HEATHER D	
480 - THE STATION			ART UNIT	
601 WEST CORDOVA STREET			PAPER NUMBER	
VANCOUVER, BC V6B 1G1			2622	
CANADA			DATE MAILED: 10/06/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/710,183

Applicant(s)

BROTHERS, KENT
MONTGOMERY

Examiner

Heather D Gibbs

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,19-27,35-37 and 39-44 is/are rejected.
- 7) ☒ Claim(s) 6-8,13-18 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1,19,27,35-36,39-43 recite the limitation "the required number of masks".

There is insufficient antecedent basis for this limitation in the claims.

3. Claims 1,39 recite the limitations "the techniques" and "the group". There is

insufficient antecedent basis for these limitations in the claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2,39 are rejected under 35 U.S.C. 102(b) as being anticipated by Gormish et al (US 5,659,631).

Regarding claim 1, which is representative of claim 39, Gormish teaches a method of reducing the volume of data representing an image, the image represented by a plurality of pixels, each pixel encoded by an original number of bits, said method comprising: a) dividing the image into a plurality of tiles (Fig 1); b) for each tile: (i) identifying the colors represented in the tile (Col 4 Lines 47-51; Fig 1b); (ii) comparing the required number of masks with a

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threshold number of masks (Fig 5); (iii) if the required number of masks is less than the threshold number of masks, generating computer-readable instructions to represent the tile using one or more of the techniques selected from the group consisting of fills and masks (Fig 5; Col 4 Lines 52-66; Col 8 Lines 23-42).

Considering claim 2, Gormish teaches for each tile: if the required number of masks is greater than or equal to the threshold number of masks, generating computer-readable instructions to represent the tile using the original number of bits per pixel or a smaller index (Fig 5; Col 8 Lines 23-42).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 37-38,44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gormish in view of Hondl (US 6,728,398).

Gormish discloses the method of reducing the volume of data representing an image, the image represented by a plurality of pixels, each pixel encoded by an original number of bits, said method of comprising: (a) dividing the image into a plurality of tiles (Fig 1); (b) for each tile: (i) identifying the colors represented in the tile (Col 4 Lines 47-51).

Gormish does not disclose expressly (ii) determining whether a data savings is achievable using an index to represent the colors in the tile; and (iii) if a data savings is achievable, representing the tiles using an index.

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Hondl discloses expressly (ii) determining whether a data savings is achievable using an index to represent the colors in the tile; and (iii) if a data savings is achievable, representing the tiles using an index (Col 2 Lines 47-61; Fig 1).

Gormish & Hondl are combinable because they are from the same scope of nature.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Hondl's index to the reduction method of Gormish.

The suggestion/motivation for doing so would have been to convert the pixel's color value to an index value.

Therefore, it would have been obvious to combine Hondl with Gormish to obtain the invention as specified in claims 37,44.

Considering claim 38, Hondl teaches wherein if a data savings is not achievable using the original data bits to represent the tile (Col 2 Lines 47-61).

Allowable Subject Matter

8. Claims 3-5,9-12,20-26,28-31 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. Claims 6-8,13-18,28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ohta et al (US 6,549,657) Image Processing Apparatus and Method.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather D Gibbs whose telephone number is 703-306-4152. The examiner can normally be reached on M-F 8AM-4PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 703-305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hdg



Heather D Gibbs
Examiner
Art Unit 2622



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